



Office 365 for SMB Jump Start

Mod 7: Exchange Online Deployment & Migration

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Jump Start Schedule – Target Agenda

Day 1 Administering Office 365	Day 2 Deploying Office 365 (1)
Office 365 Overview & Infrastructure	Exchange Online Deployment & Migration
Office 365 User Management	Exchange Online FOPE
Office 365 DirSync, Single Sign-On & ADFS	Exchange Online Archiving & Compliance
MEAL BREAK	
Administering Lync Online	
Administering SharePoint Online	
Exchange Online Overview & User Management	

Mod 7: Exchange Online Deployment & Migration



Deployment Considerations

Migration Options Decision Framework

Simple Migrations

Exchange Cutover Migration

Staged Migration

Microsoft

Options for Migration

- **IMAP (or POP) Migration**
 - Supports wide range of email platforms
 - Email only (no calendar, contacts, or tasks)
- **Exchange Migration**
 - Good for fast, direct migrations
 - No server required on-premises

Included Web-based Exchange Migration

The screenshot shows the Exchange Server 2010 administrative interface with the 'E-Mail Migration' tool open in a Windows Internet Explorer window. The browser address bar shows the URL: <https://pod51008.outlook.com/ecp/UsersGroups/EmailMigrationWizard.aspx?pwmcid=2>. The page title is 'E-Mail Migration'. The main content area is titled 'Provide connection settings for your server (Step 1 of 2)' and explains that the wizard will use administrator credentials and Autodiscover to detect settings. It states that a new cloud-based mailbox will be created for each user and that mailbox data will be migrated from Exchange to the cloud-based mailboxes. A link 'Learn more about how to migrate e-mail.' is provided. Below this, there are three required fields: 'Migration administrator e-mail address:', 'Domain\Username:', and 'Password:'. At the bottom, there is a field for 'Number of mailboxes to migrate simultaneously:' with a dropdown menu set to '3'. On the left side of the wizard, there is a 'Welcome to E-Mail Migration' message and a section titled 'Choose the mail system to migrate from' with three options: 'Exchange 2007 and later (recommended)', 'Exchange 2003 and earlier', and 'IMAP'. The 'Exchange 2007 and later' option is selected. On the right side, there is a callout box titled 'E-mail address for migration administrator' with the text: 'Designate the e-mail address for an administrator account that has access to the Exchange server that you will migrate mailboxes from.' and a 'Learn More' link.

- Free migration tools
- No software to install
- Migrate email, calendar, contacts, and tasks from Exchange 2003, 2007, 2010
- Migrate email from all platforms that support IMAP
- Allows fast cutovers or staged migration

Additional options available with tools from migration partners

Options for Co-existence

- **Co-existence with Exchange Server**
 - Allows a staged migration
 - No server required on-premises
- **Hybrid co-existence with Exchange**
 - Enables cross-premises calendaring
 - Enables smooth migration, and easy off-boarding
 - Sometimes referred to as “rich” co-existence

Hybrid Coexistence with Exchange Server

- **Share free/busy data between cloud and on-premises users**
- **Migrate users to the cloud with native Exchange tools**
- **Preserves Outlook profile after migration (no OST re-sync)**
- **Easily move mailboxes back on-premises**

Add an Exchange 2010 server to your on-premises environment to unlock advanced coexistence features



Migration vs. Co-Existence

	IMAP Migration	Exchange Migration	Co-existence	Rich Co-existence
Exchange 5.5	X			
Exchange 2000	X			
Exchange 2003	X	X	X	X
Exchange 2007	X	X	X	X
Exchange 2010	X	X	X	X
Notes/Domino	X			
GroupWise	X			
Other	X			

Additional options available with tools from migration partners

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Deployment Considerations

Migration Options Decision Framework

Simple Migrations

Exchange Cutover Migration

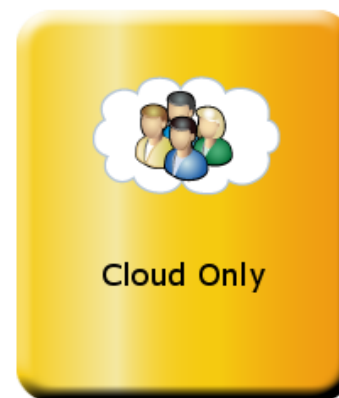
Staged Migration

Microsoft

Exchange Deployment Assistant

Welcome to the Exchange Server Deployment Assistant! This tool asks you a few questions about your current environment and then generates customized instructions you can use to upgrade to Exchange 2010 on-premises or in the cloud.

Select an option below to get started...



<http://technet.microsoft.com/en-us/exdeploy2010/default.aspx#Index>

Choice of Migration Solutions

Migration

IMAP Migration

- Supports wide range of e-mail platforms
- E-mail only (no calendar, contacts, or tasks)

Cutover Exchange Migration (CEM)

- Good for fast, cutover migrations
- No migration tool/computer required on-premises

Staged Exchange Migration (SEM)

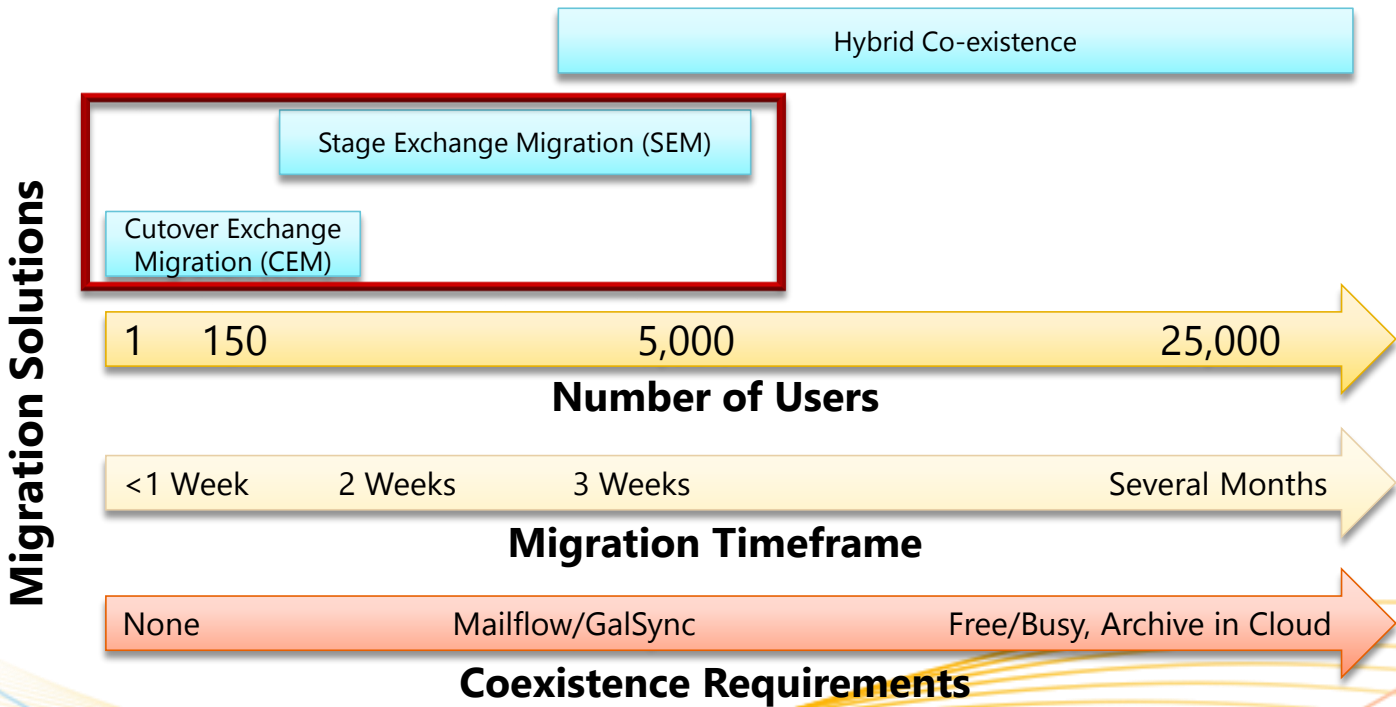
- No migration tool/computer required on-premises
- Requires directory synchronization with on-premises

Hybrid

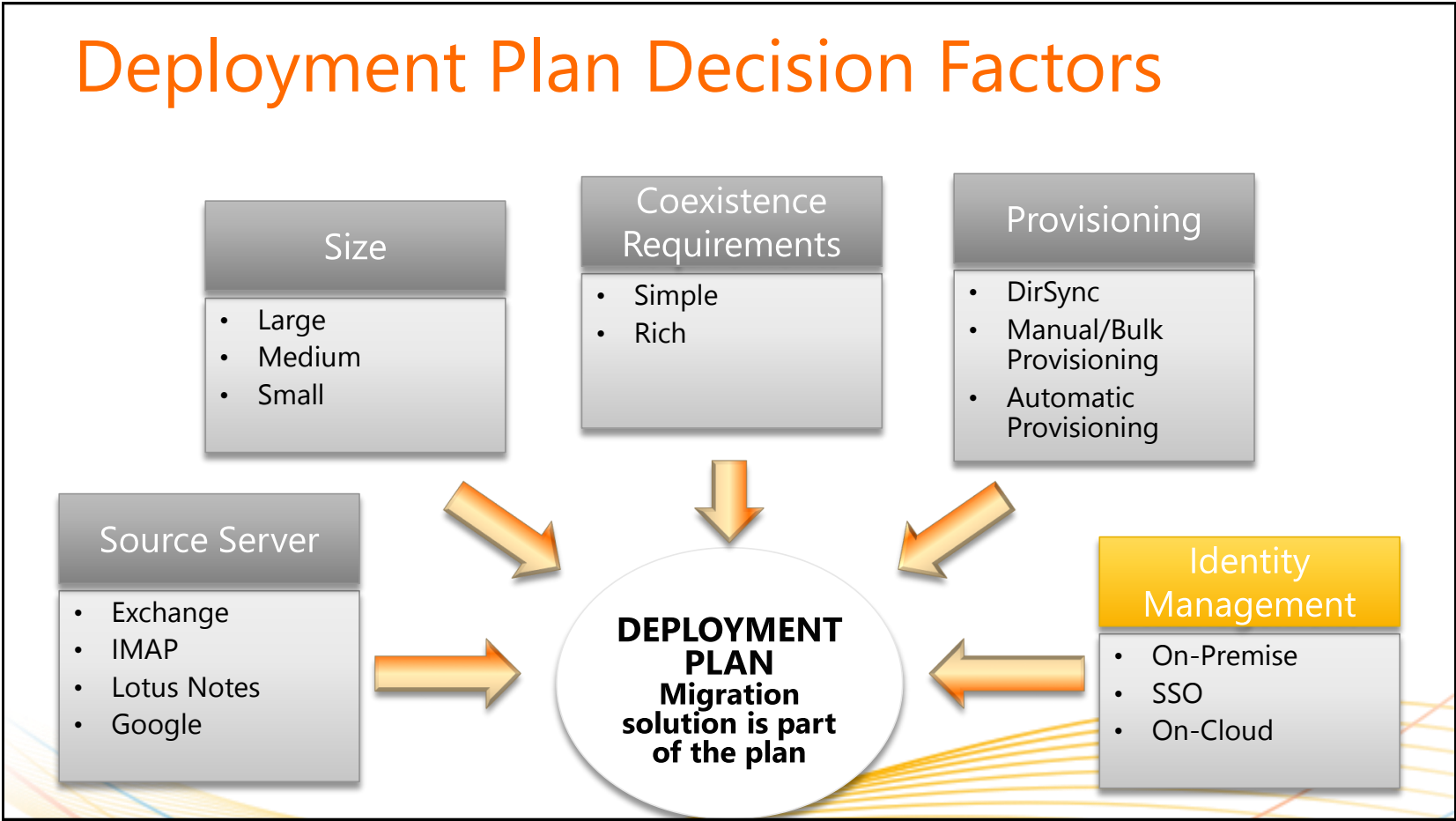
Hybrid Deployment

- Requires directory synchronization with on-premises
- Manage users on-premises and online
- Enables cross-premises calendaring, smooth migration, and easy off-boarding

Picking Exchange Migration Solution



Deployment Plan Decision Factors



Cutover vs. Hybrid

"Can I do this it weekend?"

Cutover

- **Executed over a weekend; switch the MX record**
- **All users moved as part of a "big switch" to the cloud**
 - Pilot mailboxes with alternate domain name (i.e., DOMAIN.onmicrosoft.com)
- **No on-premises config or hardware requirement**

Hybrid

- **Executed over period of time (week, month, year)**
- **No requirement to flip "a switch"**
 - Can run in hybrid scenario indefinitely
- **Requires on-premises config and hardware**

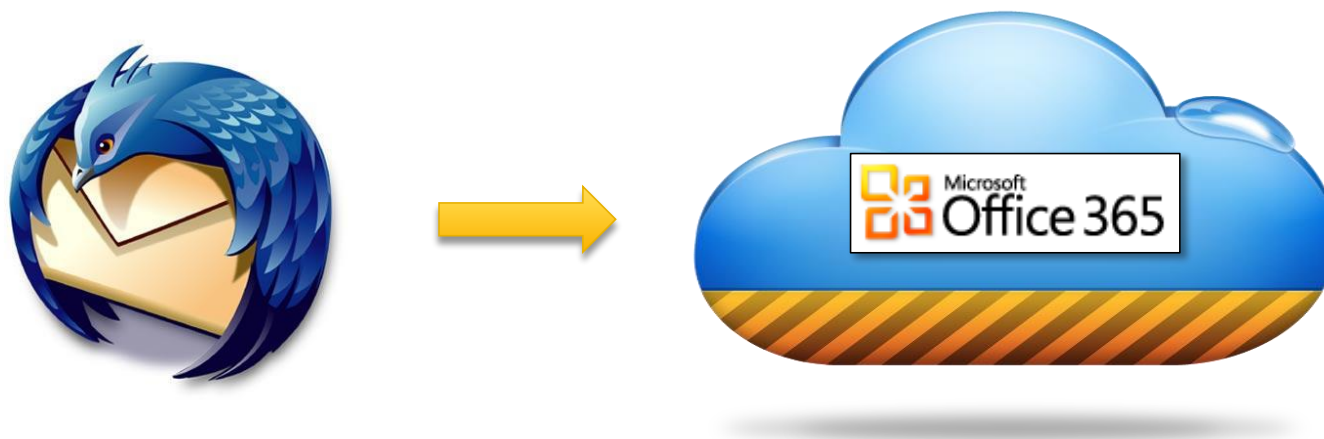
Mod 7: Exchange Online Deployment & Migration



- Deployment Considerations
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 - Simple Migrations
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 - Staged Migration

Microsoft

IMAP/POP Cutover Migration



Migrate E-Mail from an IMAP Server to Cloud-based Mailboxes

<http://help.outlook.com/en-us/140/ms.exch.ecp.emailmigrationwizardimaplearnmore.aspx>

IMAP/POP Migration Requirements

- **On-premises migration tool is not required**
- **Access to IMAP ports (TCP/143/993)**
- **Users must be provisioned in the cloud prior to migration**
 - Bulk provisioning, CSV parser, manual, etc.
- **Gather user credentials or setup admin credentials**
- **Prepare a CSV file with list of users**
 - EmailAddress, UserName, Password
 - Max of 50,000 rows
 - Max 10 MB in size

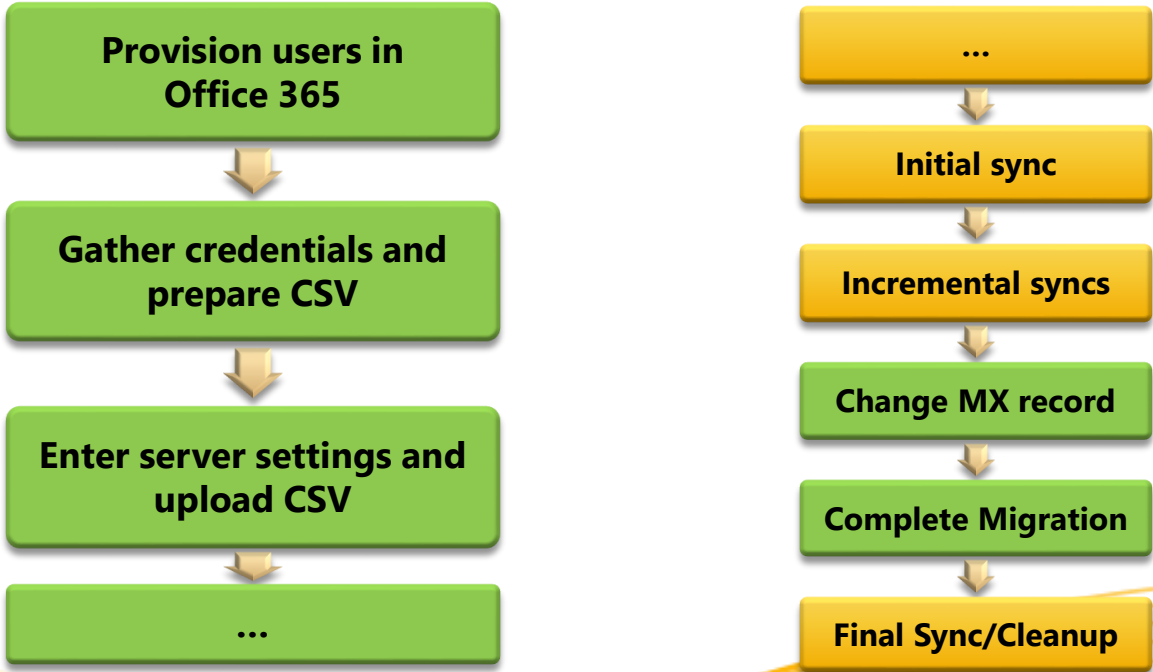
Scope: Migrated vs. Not-Migrated

- **What is migrated:**
 - Mail messages (Inbox and other folders)
 - Maximum of 500,000 items
 - Possible to exclude specific folders from migration (e.g. Deleted Items, Junk E-Mail)
- **What is not migrated:**
 - Contacts, Calendars, Tasks, etc.
 - Excluded folders
 - Folders with a forward slash (/) in the folder name
 - Messages larger than 35 MB

End User Experience

- **Admin must distribute new passwords**
 - Users' Outlook profiles created using new password
- **All mail is downloaded from the Office 365 mailbox**
 - i.e. the OST file must be recreated
- **User sets personalized password**
- **User recreates Calendar, Contacts and Tasks**

Typical IMAP/POP Cutover Migration Flow



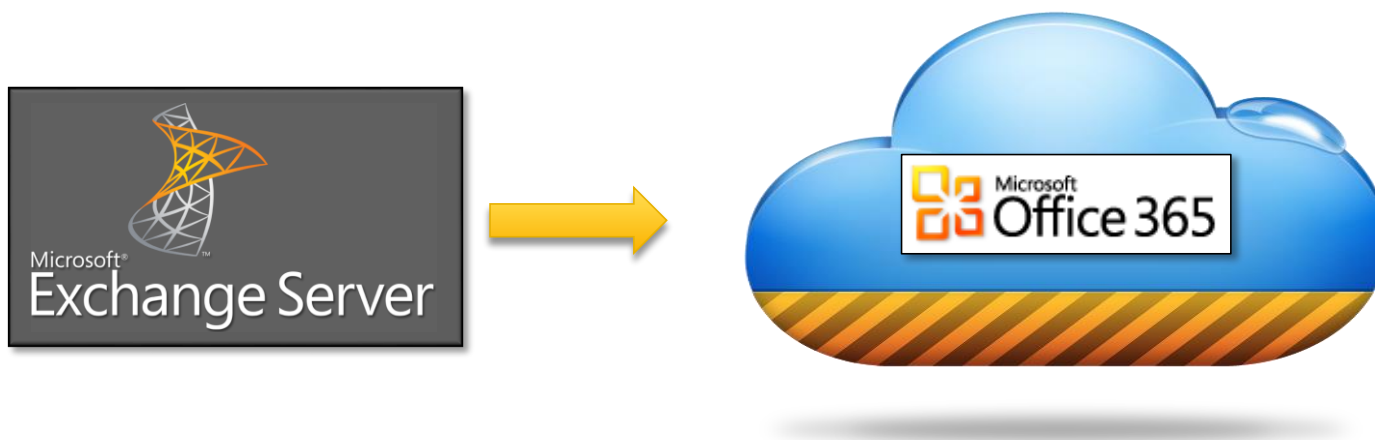
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Exchange Cutover Migration



Migrate All Mailboxes to the Cloud with a Cutover Exchange Migration

<http://help.outlook.com/en-us/140/ms.exch.ecp.emailmigrationwizardexchangelearnmore.aspx>

Exchange Cutover Migration

- **Objective**

- A simple Exchange migration solution for small and medium businesses to move to Office 365

- **Requirement**

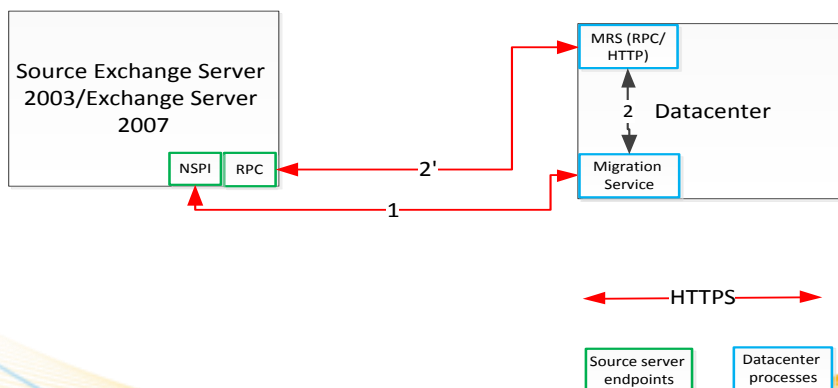
- Organization should be less than 1000 in size
- Outlook Anywhere service
- Identity management in the cloud

- **Capability**

- Migration without the need for on-premise tools
- Migration from Exchange Server 2003 and greater
- On-premise or hosted systems
- Integrated provisioning
- High fidelity migrations - mail, calendar, tasks and many more

Architecture | Simplistic View

- **Once the Administrator runs the migration wizard,**
 - Office 365 leverages the customer's Outlook Anywhere endpoint to read the on-premises Exchange directory and provision e-mail objects in Office 365
 - Outlook Anywhere (RPC over HTTP) connection used to migrate data



Requirements For Cutover Migrations

- **Outlook Anywhere on source Exchange Org**
 - Must have SSL certificate issued by a public CA
- **Migration Account with Full Access or Receive-As permissions to all mailboxes that will be migrated**
- **SMTP domain(s) configured in Office 365 tenant**
- **DirSync cannot be enabled on the Office 365 tenant**
- **Max of 1,000 mailboxes**

Accounts and Passwords Provisioning

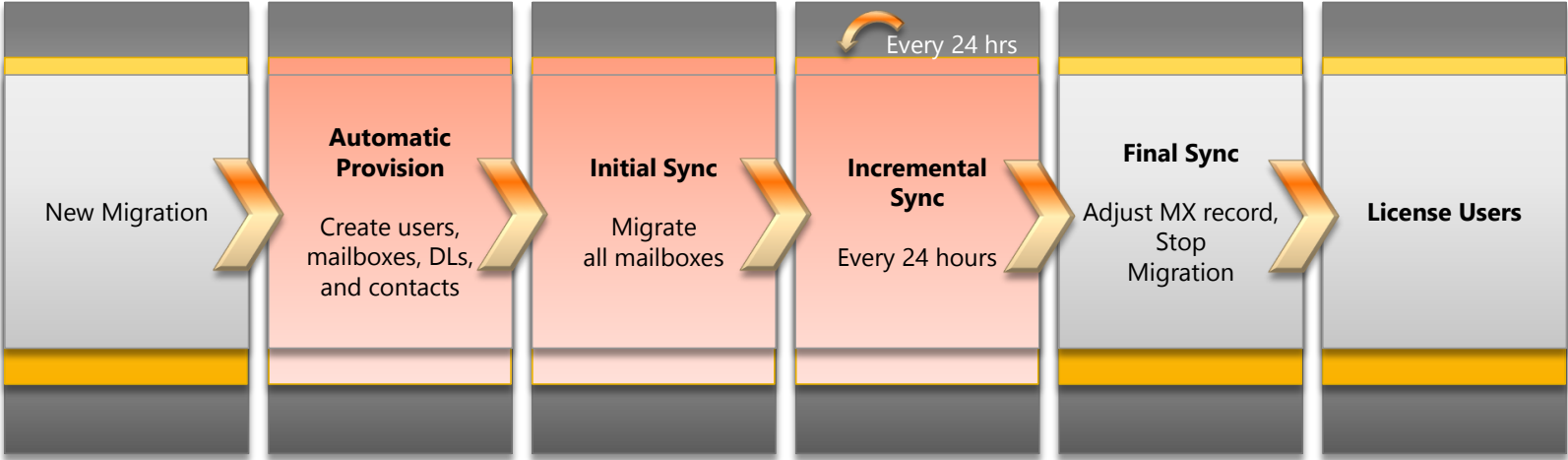
- **Accounts Provisioning**

- Migration process creates users, mailboxes, distribution groups and e-mail contacts
- Mailboxes are configured so that replies to migrated messages will work after migration
(i.e. provision process brings over the Legacy DNs)

- **Passwords**

- No access to passwords from source directory
- New passwords created for all provisioned users
- A link to download passwords is sent to admin
- Users must change password on their first login

Migration Flow



Limitations of Cutover Migrations

- **These items are NOT migrated**
 - Security Groups, Dynamic Distribution Lists, System mailboxes, Dumpster, Send-As Permissions, messages larger than 35 MB
 - Mailboxes enabled for Unified Messaging cannot be migrated
 - Existing cached-mode files (OST files) cannot be preserved
- **Partial migrations are not possible**
 - Folder exclusion
 - Time range selection
- **Not possible to configure the incremental sync interval (24 hours)**

Data Migration | Mail Items Migrated

- **Message Items**
 - Delivery Reports
 - Read/Non-Read Receipts
 - NDRs
- **Folders**
- **Rules**
- **Categories**

Data Migration Scope | Calendar Items

- **Calendar items**
- **Recurrences**
- **Exceptions**
- **Meeting Requests/Cancelations/Responses**
- **Out-of-Office settings**
- **Categories**

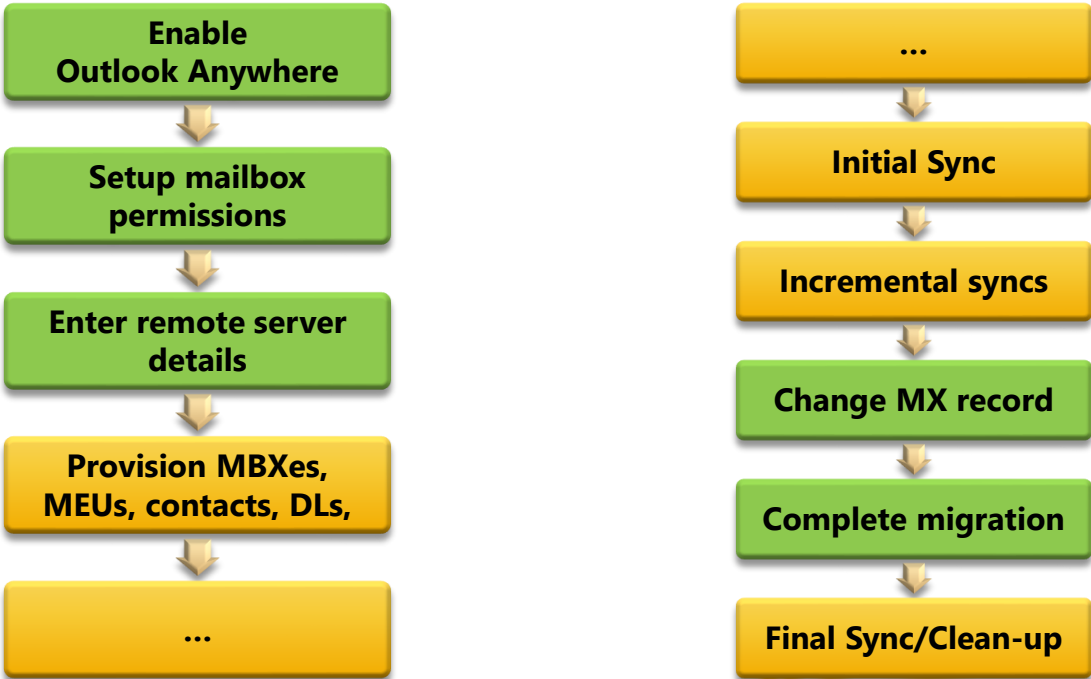
Data Migration Scope | Other Items

- **Tasks**
- **Notes**
- **Contacts**
- **Public delegates**
- **Folder permissions**
- **Custom forms**
- **Outlook settings (e.g. folder favorites)**

End User Experience

- **Admin needs to distribute new passwords to end users**
- **Users' Outlook profiles created using new password**
- **All mail is downloaded from the Office 365 mailbox**
 - (i.e. the OST file must be recreated)
- **User sets personalized password**

Typical Exchange Cutover Migration Flow



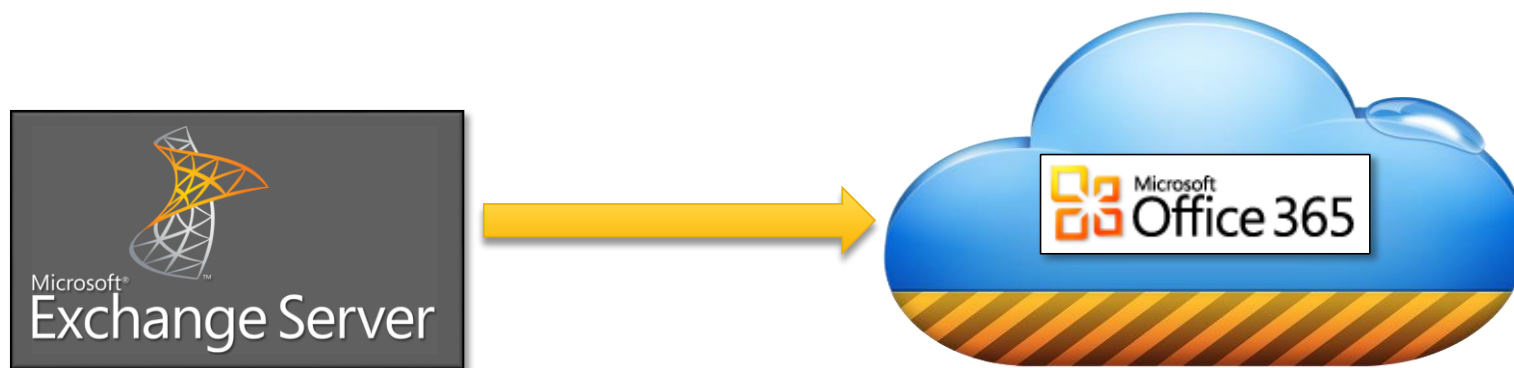
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- Deployment Considerations
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Microsoft

Staged Migration



Migrate Mailboxes to the Cloud with a Staged Exchange Migration

<http://help.outlook.com/en-us/140/ff959224.aspx>

Exchange Staged Migration

- **Objective**

- Simple Exchange migration solution for medium and large size organizations

- **Requirement**

- Outlook Anywhere service
- Identity management on-premises (DirSync)

- **Capability**

- Migration from Exchange Server 2003 and Exchange 2007 only (*)
- Migrate in batches
- High fidelity migrations
- Mail, calendar, tasks & many more

- *** for Exchange 2010 consider Cutover or Hybrid**

Requirements For Staged Migrations

- **Outlook Anywhere on source Exchange Org**
 - Must have SSL certificate issued by a public CA
- **Migration Account with Full Access or Receive-As permissions to all mailboxes that will be migrated**
- **SMTP domain(s) configured in Office 365 tenant**
- **DirSync must be enabled on the Office 365 tenant**
- **Simple Coexistence**
- **No limit on the overall number of mailboxes to migrate (up to 1,000 mailboxes in each CSV batch)**

Simple Coexistence

- **Use DirSync to establish address book in Office 365**
- **Mail flow between all mailboxes**
- **During migration, mailboxes exist across on-premises and Office 365**
- **End goal is to fully migrate to Office 365**
- **No Free/Busy calendar sharing**

Accounts and Passwords Provisioning

- **Accounts Provisioning**

- For every on-premises mailbox to be migrated there needs to be a MEU or Mailbox in Office 365
- Migration Service relies on DirSync to do the provisioning

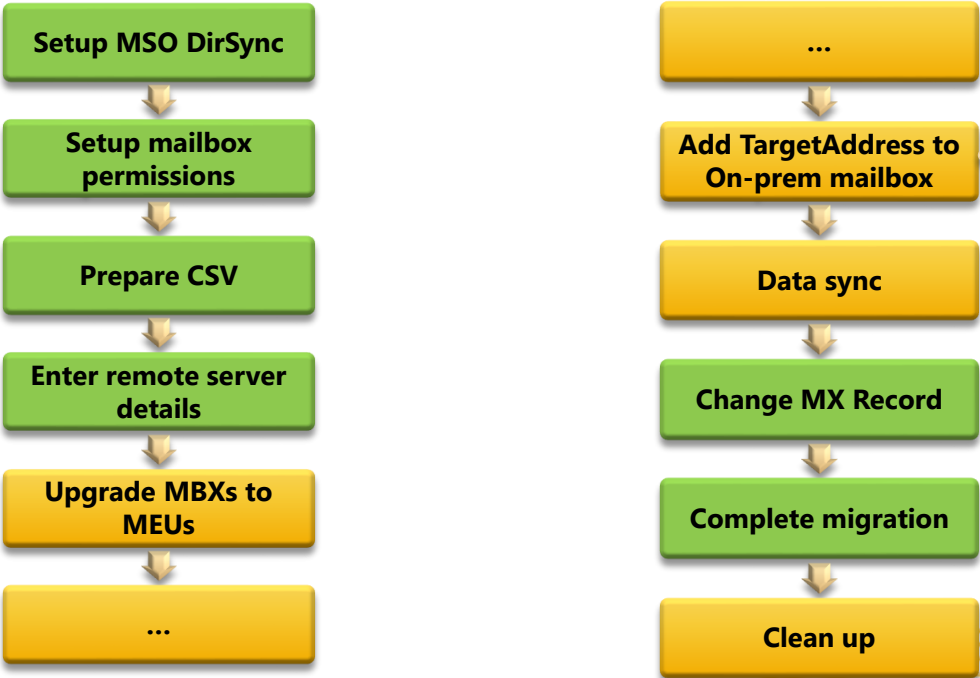
- **Passwords**

- Target mailbox passwords need to be specified for all the users
- Administrators can force users to change passwords on first login

Differences from Cutover

- **Staged batches of 1,000 users (max per batch), no upper limit**
 - Incremental syncs not needed
- **Users start using their cloud mailboxes upon creation**
 - New mail is available immediately, old content fills in
- **Stamps targetAddress on source mailboxes to support mail flow from on-premises to cloud (*)**
- **Optional password change**

Typical Exchange Staged Migration Flow



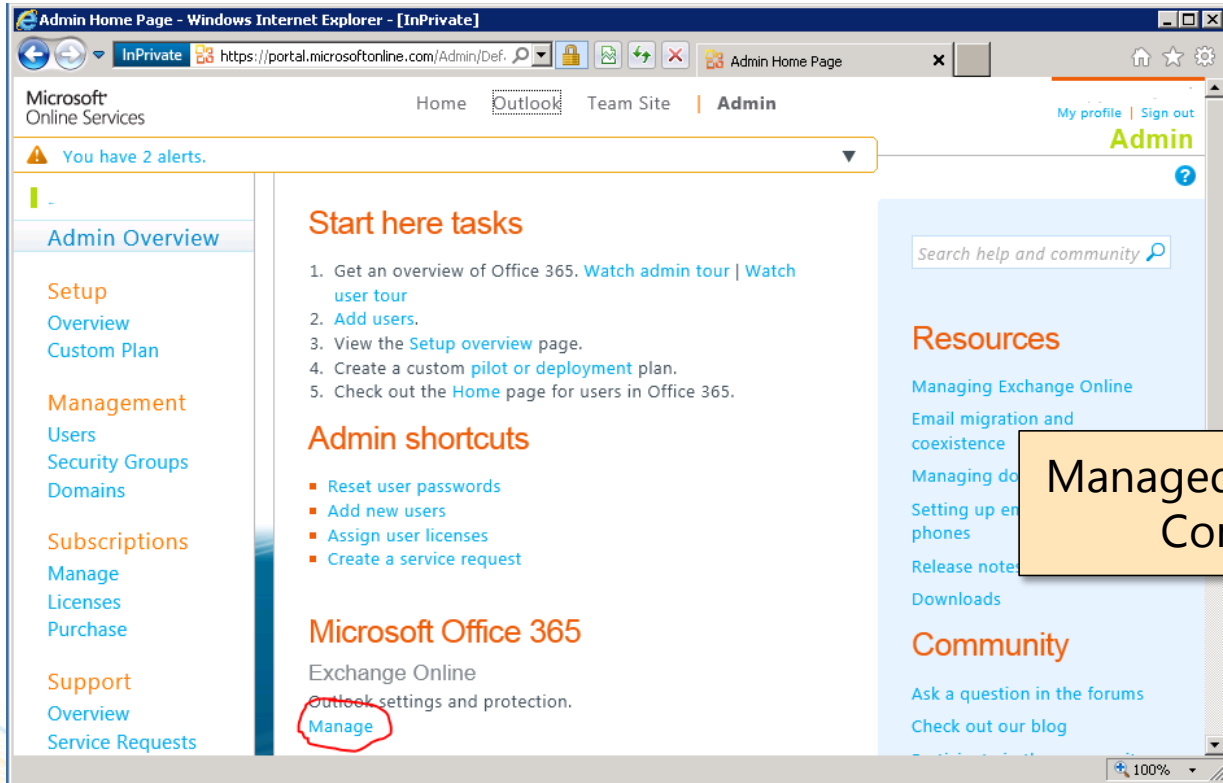
Simple Coexistence



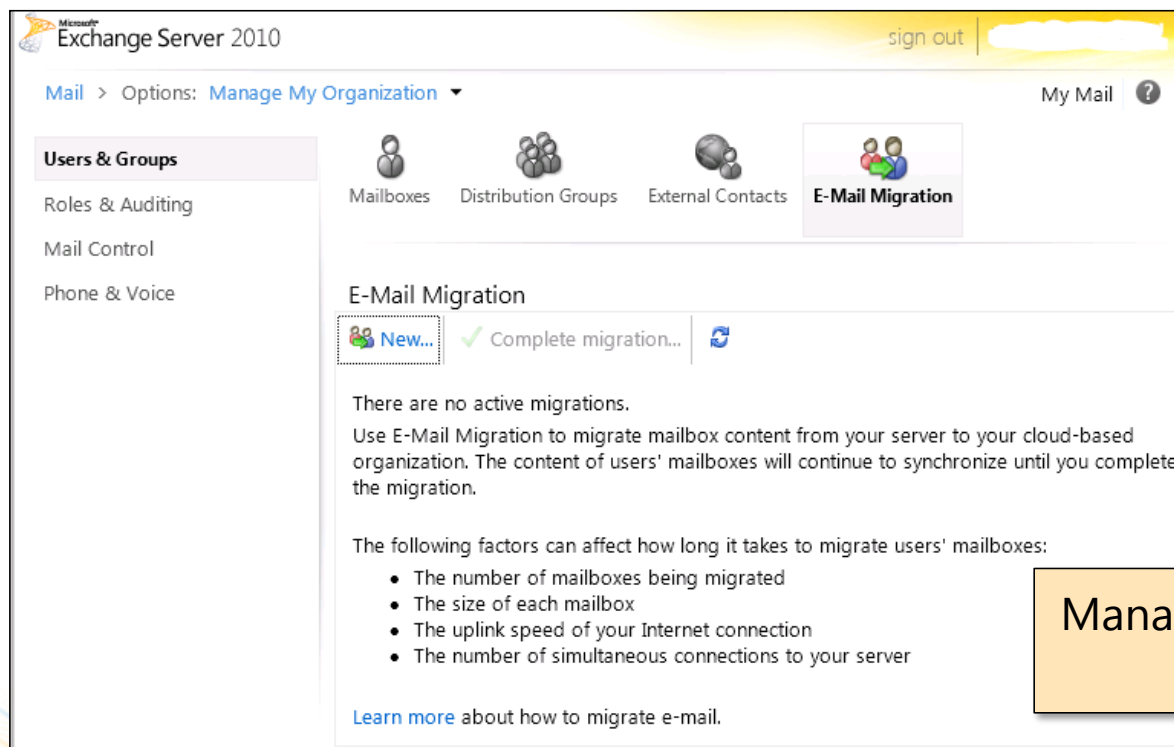
DEMO | Migration Tools (ECP)

Microsoft

Exchange Management Console & Shell

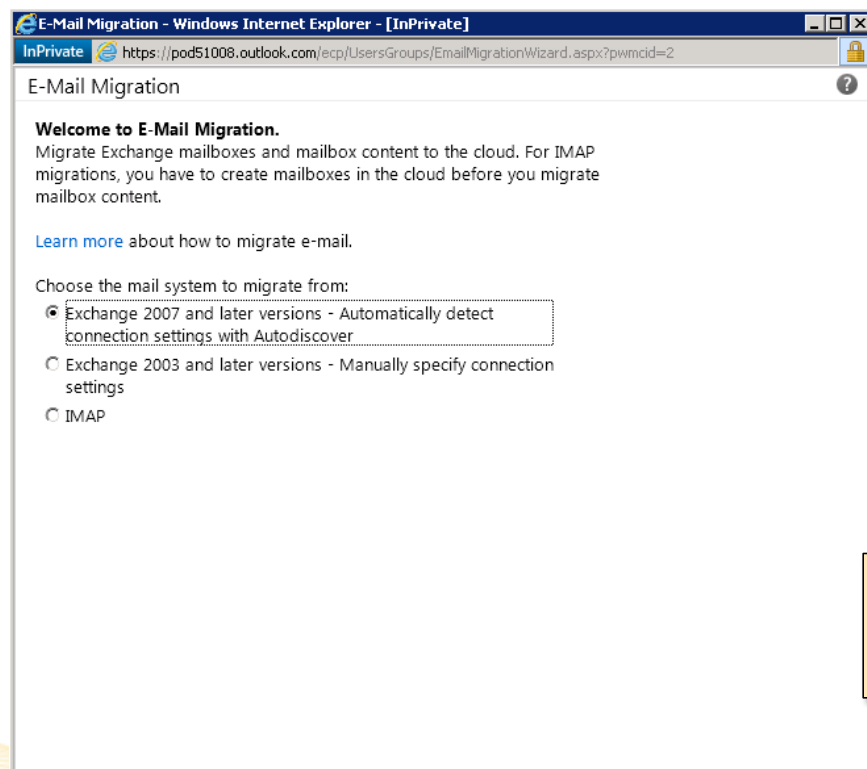


Exchange Management Console & Shell



Managed from Exchange
Control Panel (ECP)

Exchange Management Console & Shell



Managed from Exchange
Control Panel (ECP)

Exchange Migration with ECP

E-Mail Migration - Windows Internet Explorer - [InPrivate]

InPrivate https://pod51008.outlook.com/ecp/UsersGroups/EmailMigrationWizard.aspx?pwmcid=2

E-Mail Migration

Provide connection settings for your server (Step 1 of 2)

We'll use your administrator credentials and the Autodiscover service to detect the connection settings for your Exchange server.

A new cloud-based mailbox will be created for each user in your Exchange organization. Then mailbox data is migrated from Exchange to the cloud-based mailboxes.

[Learn more](#) about how to migrate e-mail.

*Required fields

* Migration administrator e-mail address:

* Domain\Username:

* Password:

Number of mailboxes to migrate simultaneously:

3

E-mail address for migration administrator

Designate the e-mail address for an administrator account that has access to the Exchange server that you will migrate mailboxes from.

[Learn More](#)

Managed from Exchange
Control Panel (ECP)

Exchange Migration with PowerShell

- **New-MigrationBatch**
- **Start-MigrationBatch**
- **Get-MigrationBatch**
- **Get-MigrationStatus**
- **Complete-Migration**
- **Test-MigrationServerAvailability**

Resources

- **Exchange Deployment Assistant**
 - <http://technet.microsoft.com/en-us/exdeploy2010/default.aspx#Index>
- **Exchange Remote Connectivity Analyzer**
 - <https://www.testexchangeconnectivity.com>
- **Performance Test for Internet Connection to Microsoft Online Services**
 - <http://speedtest.microsoftonline.com>



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